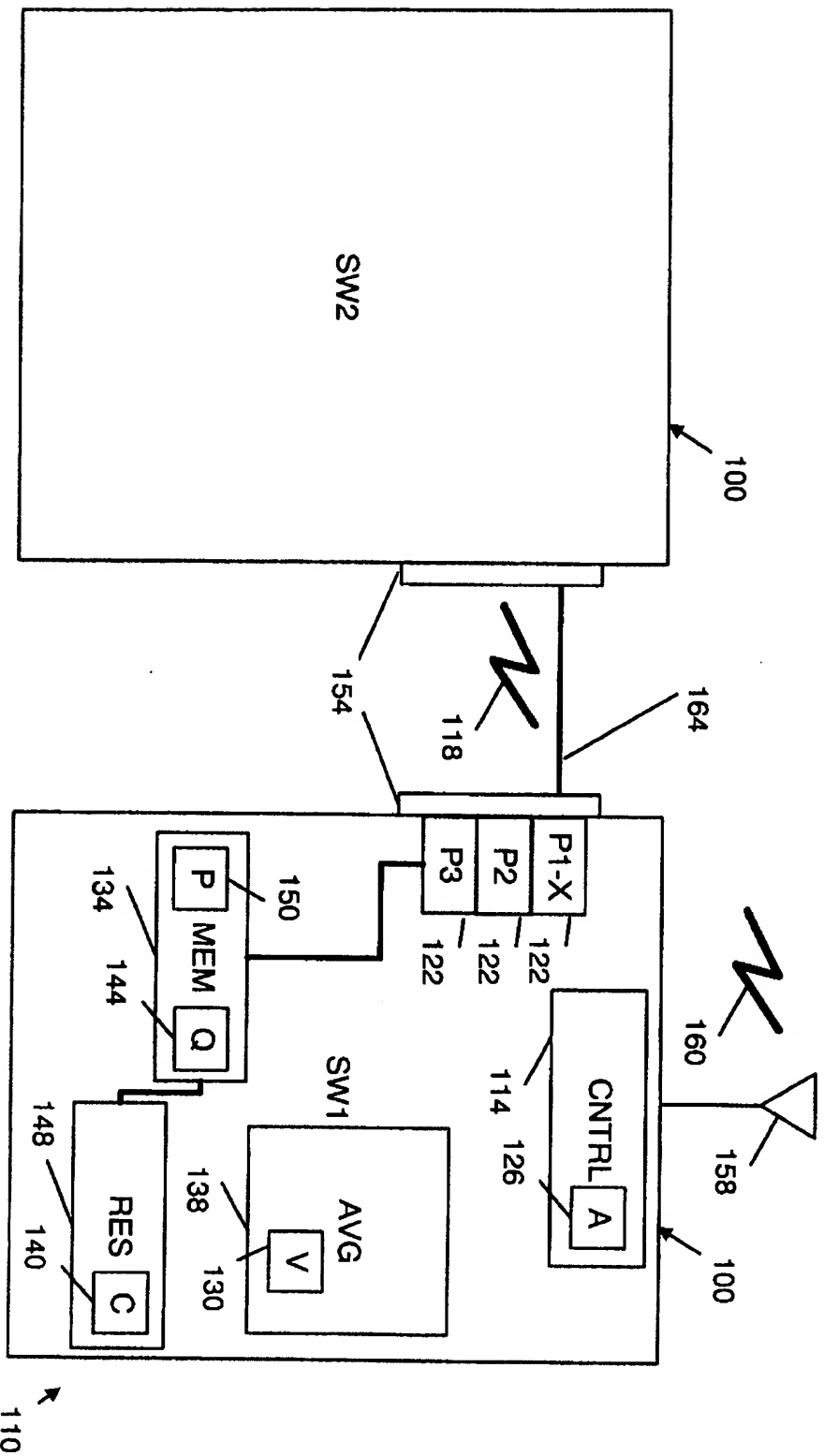


FIG. 1



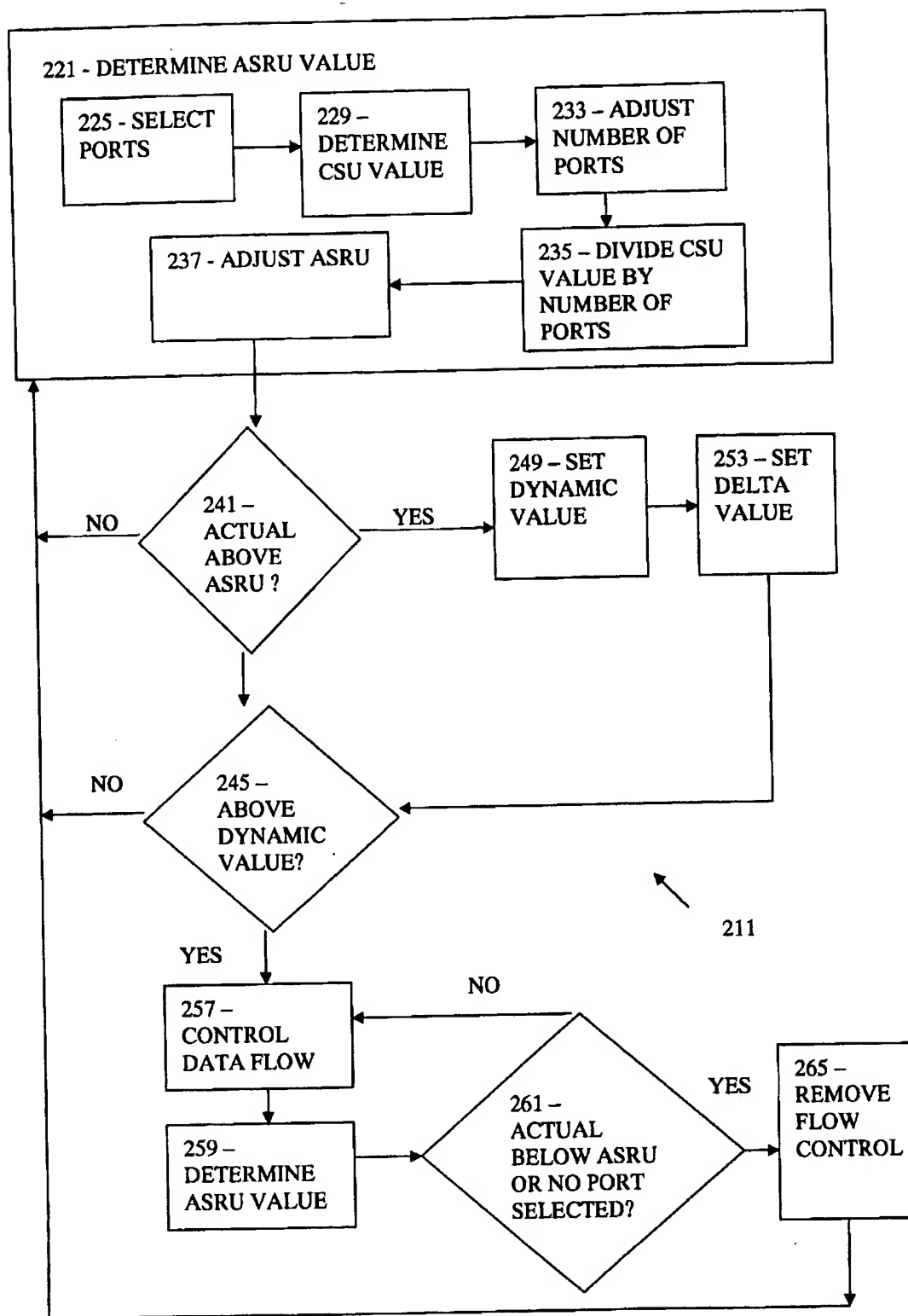


FIG. 3

```

PortRxUsage = Per Receive port utilization of memory
PortRxSharedUsage = (PortRxUsage > Tpmin)? (PortRxUsage - Tpmin): 0
CumulativeSharedUsage = SUM (PortRxSharedUsage)
Delta Value = Function(port speed, overall resource usage)

372 if (CumulativeSharedUsage is greater than a memory level for which adaptive flow
control is enabled) 380
{
    NumPortsInShared = count of all the ports which are using memory in shared
                        space // Different speed ports are scaled accordingly. 10G
                        is counted as 10 ports. This value is used to determine
                        the average shared memory usage per 1G port.

    AverageSharedUsage1G = [CumulativeSharedUsage / NumPortsInShared]
    AverageSharedUsage10G = AverageSharedUsage1G * 10
    DynamicThresh1G = AverageSharedUsage1G + Delta value
    DynamicThresh10G = AverageSharedUsage10G + Delta value
    DynamicThresh1Gdown = DynamicThresh1G - Delta value
    DynamicThresh10Gdown = DynamicThresh10G - Delta value
} 382

DynamicThresh = (Portspeed == 10G) ? DynamicThresh10G : DynamicThresh1G
DynamicThreshdown = (Portspeed == 10G) ?
    DynamicThreshdown10G : DynamicThreshdown1G

if (PortRxSharedUsage >= DynamicThresh) 384
{ // this port is consuming more than the average
    AssertFlowControl;
    FlowControlTime = 16'hFFFF or
        Function(PortRxSharedUsage - DynamicThresh)
}
else if (PortRxSharedUsage < DynamicThreshDown) or
        (PortRxUsage <= Tpmin) 386
{ // this port is no longer causing congestion
    DeassertFlowControl;
}

```

FIG. 4

